GALVESTON LAB FACT SHEET 2011



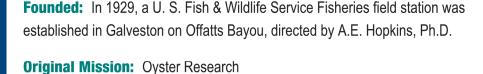
NOAA FISHERIES SERVICE GALVESTON LABORATORY

4700 Avenue U Galveston, TX 77551

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http://galveston.ssp.nmfs.gov/

Science, Service, Stewardship



Early Research:

In 1931, the Laboratory became one of four FWS field stations to do shrimp research in the Gulf of Mexico directed out of New Orleans by F.W. Weymouth.

Present Facility:

Established in 1950, at the old U.S. Army Ft. Crockett in Galveston, as a Bureau of Commercial Fisheries Laboratory. Historical designation. Renovated 2008. Over 70,000 square feet of offices and laboratories in 10 buildings with a 130,000-gallon seawater system. Research space is shared with National Ocean Service's (NOS) Flower Garden Banks National Marine Sanctuary (FGBNMS), Physical Oceanographic Real Time System (PORTS) and the Texas Marine Mammal Stranding Network (TMMSN).

Present Mission:

Research on management of shrimp, sea turtles and coastal wetlands.

Present Director: Roger J. Zimmerman, Ph.D. **Administrative Services**: Mr. James Randolph

Employees: 75 (35 federal, 27 contract, 13 students/volunteers) **Annual Budget:** \$7.6 million in 2009 (\$5.5 million NOAA funds)

Research Branches:

Fishery Management Branch - Dr. James M. Nance Fishery Ecology Branch - Dr. Thomas J. Minello

Protected Species Branch - Vacant

Estuarine Habitats & Coastal Fisheries Center (Lafayette, LA) - Dr. John Foret SERO Habitat Conservation Division, Gulf of Mexico Branch - Mr. Rusty Swafford

Programs:

Offshore Fishery Observers (shrimp, red snapper, bottom longline grouper, pelagic longline tuna and mackerel), Shrimp Stock Assessment, Oil Platform Removal Observers, Bycatch Characterization, Shrimp Biology, Shrimp Catch Statistics, Monitoring of Sea Turtle and Marine Mammal Strandings, Sea Turtle TED and Longline Research, Essential Fish Habitat Research, Coastal Wetland Restoration, Ecosystem Modeling.

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1950's

- Instituted a long-term record of U.S. shrimp fishery catch statistics (continuous since 1956).
- Developed a geographic Subarea System for Analyses of Fishery Data in the Gulf of Mexico.
- Conducted early research on red tides.

1960's

- Studied life cycles of brown shrimp and white shrimp.
- Reared brown shrimp and white shrimp in captivity from eggs.
- Developed hatchery methods for shrimp aquaculture.
- Conducted early research on shrimp growout in pond culture.
- Determined immigration patterns of postlarval shrimp in the Gulf of Mexico.
- Developed shrimp tagging methods for migration and population studies.
- Studied salinity and temperature effects on postlarval white shrimp and brown shrimp.
- Developed the Baxter/Berry bait shrimp index to correlate brown shrimp catch.

1970's

- Conducted oceanographic surveys of circulation and bathymetry in the Gulf of Mexico.
- Initiated the "Headstart" experiment for conservation of Kemp's ridley sea turtles.
- Developed methods for captive rearing of sea turtles.
- Undertook environmental surveys of the Gulf of Mexico shelf for the U.S. Dept of Energy.
- Determined offshore migration patterns for penaeid shrimps in the Gulf of Mexico.
- Contributed to development of the Shrimp Fishery Management Plan for the Gulf of Mexico.
- Conducted stock identification (genetic) studies of penaeid shrimp.
- Developed a long-term (streamer) tag for penaeid shrimp.
- Conducted Environmental Impact Studies of offshore petroleum storage in salt domes.

1980's

- Issued forecasts of annual yields of western Gulf brown shrimp and Florida pink shrimp.
- Quantified utilization of marsh, seagrass and mangrove habitats by shrimps, crabs and fishes.
- Quantified feeding and protective functions of estuarine wetlands for fishery species.
- Compared ecological value of created versus natural wetlands for estuarine species.
- Determined effects of freshwater inflow on use of Texas marshes by fishery species.
- Developed life-time tagging methods for hatchling and juvenile sea turtles.
- Released thousands of head-started Kemp's ridleys into the Gulf of Mexico.
- Evaluated Turtle Excluder Devices (TEDs) in shrimp trawls.
- Assessed changes in size distributions of shrimp by weight and value of annual landings.

1990's

- Characterized bycatch from shrimp trawls, gill nets, fish traps, and longlines.
- Evaluated Bycatch Reduction Devices (BRDs) in shrimp trawls.
- Developed an ecosystem-based shrimp fishery bycatch model.
- Tracked movements of sea turtles through satellite, radio and sonic telemetry.
- Studied natural designs of seagrass and marsh habitats beneficial to fisheries.
- Studied effects of marsh habitat loss and restoration on fisheries production.
- Established parameters for evaluation of essential fish habitat in the Gulf of Mexico.
- Confirmed nesting of 10 year-old Headstarted Kemp's ridleys on Padre Island.
- Participated in the regional Sea Turtle Stranding and Salvage Network.

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2000's

- Initiated research of Gulf and Caribbean coral reefs.
- Supported Community-based Habitat Restoration in Texas and Louisiana.
- Began development of ecosystem models for use in ecosystem-based fishery management.
- Quantified shrimp production derived from estuarine habitats
- Initiated cooperative work with Mexico on the Gulf of Mexico Large Marine Ecosystem
- Examined effects of habitat change and fishing pressure on populations of Queen Conch in the USVI
- Responded to the 2010 Deep Water Horizon oil in the Gulf of Mexico

Research Partners and Cooperators:

Coastal Bend National Estuary Program

Ecuador Instituto de la Pesca

Everglades National Park

Florida Department of Environmental Protection

Galveston Bay National Estuary Program

Galveston Bay Foundation

Galveston Independent School District

Gladvs Porter Zoo

Gulf & South Atlantic Fisheries Development Foundation, Inc.

Gulf of Mexico Fishery Management Council

Houston Zoo

LGL Ecological Research Association

Mexico's Departamento de la Pesca

Mexico's Secretariat of Environment and Natural Resources

Moody Gardens Aquarium

New England Aquarium

Northern Gulf Institute

Louisiana Department of Wildlife and Fisheries

Louisiana State University

Port of Houston Authority

Savannah State University

Scenic Galveston

Texas A&M University

Texas Marine Mammal Stranding Network

Texas Parks and Wildlife Department

Texas Sea Grant

Texas Sea Turtle Stranding and Salvage Network

Texas Shrimpers Association

University of Houston

University of Louisiana at Lafayette

University of Puerto Rico

University of Texas

US Army Corps of Engineers at Galveston and New Orleans

US Coast Guard at Galveston

US Department of Interior / Bureau of Ocean Energy Management, Regulation and Enforcement

US Environmental Protection Agency/Region IV and Gulf of Mexico Program

US Fish and Wildlife Service/Environmental Services at Clear Lake

US National Park Service at Padre Island National Seashore